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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,285	04/28/2005	Boris Iosifovitch Mekhanoshin		6016

7590 10/10/2006
Ilya Zborovsky
6 Schoolhouse Way
Dix Hills, NY 11746

EXAMINER

FRANK, RODNEY T

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/533,285	MEKHANOSHIN ET AL.	
	Examiner	Art Unit	
	Rodney T. Frank	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213. ✓

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/28/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 28 April 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein with regard to the foreign references has not been considered.

Claim Objections

2. Claims 1, 4, 9, and 12 are objected to because of the following informalities: At the first instance in the claims for the term OHTL, this abbreviation should be spelled out and then followed by the abbreviation in parenthesis. For example, it is OK to have it say a device for remote monitoring of overhead transmission lines (OHTL). In the alternative, each claim should have OHTL spelled out. Appropriate correction is required.

3. Claims 1-13 are objected to because of the following informalities: The claims are very difficult to read as far as their attention to grammar and structure. For example, claim 2 would read better is it were changed to read something like this:
A device as in claim 1, where the measuring and transmitting module contains a control unit, a receiver, conductor status signal converter, etc. The examiner read the claims with an understanding that is to the best of the examiners ability. Appropriate correction is required.

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4. Claim 3 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim *should refer to other claims in the alternative only*. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, and 4-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fernandes (U.S. Patent Number 4,904,996), and further in view of Gaukel (U.S. patent Number 6,072,396). Fernandes discloses a mobile system for monitoring electrical, physical and/or environmental parameters and conditions associated with or in proximity to an energized electrical power conductor supported on a succession of towers extending along a power corridor. In a first embodiment, the system includes front and rear propulsion modules surrounding the conductor and carrying a payload module therebetween. The propulsion modules include linear induction or rotary DC motors deriving power directly from the power conductor. The payload module carries equipment such as video and infrared cameras, and apparatus for lightning flash, ambient temperature, acoustic and corona detection, and a transmitter for relaying appropriate signals to a remote ground station. In another embodiment, the payload

module is mounted upon a lightning shield wire of the power line and is connected to a propeller-driven helium blimp for movement along the wire. In both embodiments, the line-mounted equipment includes appropriate apparatus which allows movement thereof past obstructions on the line (Please see the abstract).

With respect to claim 1, Fernandes discloses and illustrates in view of figures 1, 2, and 4 the bulk of the claim limitations, namely a device for remote monitoring of OHTL with a housing (20) with a means of attaching to the power line, a power supply, and a microcontroller. Fernandes discloses, however, the use of an RF link to convey information instead of a cellular telephony channel. While the use of an RF link in lieu of a cellular telephony channel would be considered a well within the preview of one of ordinary skill in the art, the use of GPS and cell phone for tracking is known in the art.

Such a system is disclosed in Gaukel. Gaukel discloses an apparatus and method of monitoring mobile objects or persons that utilizes the Global Positioning System satellites and cellular telephone communications. The apparatus may include first and second remote units adapted to be worn on the monitored person or object. These remote units would comprise the position and data sensors as well as the transmitter device to transmit the information back to a central tracking station. The remote units may be operative to monitor many data items such as system integrity, motion temperature, audio, and the like in addition to position. This data would then be transmitted back to a central monitoring station operative to process and display the information. The system is also adapted to monitor persons in hazardous environments such as radioactivity or poisonous gases or even to monitor inanimate objects such as

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automobiles (Please see the abstract). With this in mind, Gaukel discloses the needed cellular telephony with the motivation being to be able to truly have a remote monitoring system by adding the functionality required for such a device.

With respect to claims 2, 5, 7, and 8, as can best be determined by the examiner, this claim is directed to various components of the sensor system. Figure 4 shows a multitude of components to the system of Fernandes, which these components are deemed as either equivalent or the same as those claimed.

With respect to claim 4, similar to claim 1, while Fernandes discloses the majority of the claimed limitations, Fernandes is deficient of utilizing a GPS to determine the position of the apparatus. Again, Gaukel discloses the use of GPS in order to determine the location of a person or an object. With this in mind, one would be motivated to utilize the GPS monitoring taught in Gaukel with the sensor arrangement disclosed in Fernandes in order to have a truly automated system.

With respect to claim 6, as shown in figure 4, all the components of the device appear to be connected to each other, which include the radio link/cellular telephony portion.

With respect to claims 9 and 10, while the exact position of the various sensors is not disclosed, the position of the sensor is not key to the operation of the device, and thus all sensors and components except for the motors to move the device, are disclosed as being in the housing, thus the claim is considered to be generally disclosed.

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With respect to claims 11–13, the power supply is disclosed to be used with the system and the various types of power supply, while not specifically disclosed, are all deemed as well known equivalents and thus well within the spirit of the present invention. For example, one would want to employ a solar cell for a power supply source since the device is outside and supposedly able to operate stand alone.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney T. Frank whose telephone number is (571) 272-2193. The examiner can normally be reached on M-F 9-5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RTF

September 29, 2006



HEZRON WILLIAMS
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